



Student Name_____ Date_____

Lunar Testing Facility: Construction Task

As we begin to explore the moon, lunar rovers will be an important part of the exploration. However, before a rover can be sent to the moon, NASA scientists and engineers will need to collect data describing the forces and motions exerted by the rover. The purpose of the Lunar Testing Facility is to test the rovers in a simulated lunar environment for the classroom. The testing facility would need to have the following characteristics:

1. A testing track with inter-changeable surfaces to measure speed, distance, and time.
2. A crater with adjustable sides (inclined plane) to determine the best angle the rover can safely climb.
3. A measurement devise to identify the force exerted by the rover as it travels over the simulated lunar surface.
4. A sand pit to test the student rovers' performance in simulated lunar soil.

Construction Task

Each student group will design and construct a Lunar Testing Facility that could be used to test the rover for the forces and motion exerted by the rover.